## What is claimed is:



3

- 1. A method of handling operation in a multi-threaded processing system, comprising: determining if a stalled operation of a first thread is due to a loading of data from a memory device; and
- flushing an instruction from said first thread from a pipeline of said processing system
  when data is to be loaded from said memory device before executing said instruction.
- 1 2. The method of claim 1 wherein said memory device is system memory coupled to a 2 memory bus.
- 1 3. The method of claim 1 further comprising:
- 2 marking said instruction as a miss.
- 1 4. The method of claim 3 further comprising:
- rescheduling said instruction to be executed in said pipeline.
- 1 5. A method of handling operation in a multi-threaded processing system, comprising:
- determining if a stalled operation of a first thread is due to a loading of data from a
- memory device; and
- flushing an instruction from said first thread from a pipeline of said processing system
- 5 when data is to be loaded after a predetermined number of clock cycles from said memory device
- 6 before said instruction can be executed



- 6. The method of claim 5 wherein said memory device is system memory coupled to a memory bus.
- 1 7. The method of claim 6 further comprising:
- 2 marking said instruction as a miss.
- 1 8. The method of claim 7 further comprising:
- 2 rescheduling said instruction to be executed in said pipeline.
- 9. The method of claim 8 further comprising:
  - executing said instruction when data is loaded from said memory device.
  - 10. A processing system comprising:
  - a scheduler to pass instructions from first thread and second threads to an execution
- 3 pipeline; and
- pipeline control logic coupled to said execution pipeline to determine if a stalled
- 5 execution of a first thread is due to a loading of data from a memory device and to flush an
- 6 instruction from said first thread from said execution pipeline when data is to be loaded from
- 7 said memory device before said instruction can be executed.
- 1 11. The processing system of claim 10 wherein said pipeline control logic is to mark said
- 2 instruction as a miss.



- 12. The processing system of claim 10 further comprising:
- an exception and retirement logic coupled to said execution pipeline.
- 1 13. The processing system of claim 12 wherein said instruction marked as a miss is to be
- 2 detected by said exception and retirement logic.
- 1 14. The processing system of claim 13 further comprising:
- a fetch unit to provide said instruction to said scheduler.
- 1 15. The processing system of claim 14 wherein said pipeline control logic is to cause said
- instruction to be executed when data is loaded from said memory device.
- 16. A computing system comprising:
- a memory bus coupled to system memory; and
  - a processing system coupled to said memory bus, said processing system including
  - a scheduler to pass instructions from first thread and second threads to an
- 5 execution pipeline; and
- pipeline control logic coupled to said execution pipeline to determine if a stalled
- execution of a first thread is due to a loading of data from system memory and to flush an
- 8 instruction from said first thread from said execution pipeline when data is to be loaded
- from said system memory before said instruction can be executed.



2

- 17. The computing system of claim 16 wherein said pipeline control logic is to mark said instruction as a miss.
- 1 18. The computing system of claim 10 wherein said processing system further includes 2 an exception and retirement logic coupled to said execution pipeline.
- 1 19. The computing system of daim 18 wherein said instruction marked as a miss is to be
  2 detected by said exception and retirement logic.
- The computing system of claim 19 wherein said processing system further includes a fetch unit to provide said instruction to said scheduler.
- 1 21. The computing system of claim 20 wherein said pipeline control logic is to cause said instruction to be executed when data is loaded from said system memory.